

The invention is the discovery of an actinomycete genus, given the name Salinospora gen. nov., that displays an obligate requirement of seawater (Na.sup.+) for growth and unique 16S rRNA signature nucleotides. The invention is also the use of the genus for the production and discovery of active biomolecules such as pharmaceutical agents, agrichemicals, immunomodifiers, enzymes and enzyme inhibitors.

AN 2003:225883 USPATFULL

TI Marine actinomycete taxon for drug and fermentation product discovery

IN Fenical, William, Del Mar, CA, UNITED STATES
Jensen, Paul R., San Diego, CA, UNITED STATES
Mincer, Tracy J., San Diego, CA, UNITED STATES

PI US 2003157695 A1 20030821 AI US 2001-991518 A1 20011116 (9) PRAI US 2000-249356P 20001116 (60)

DT Utility FS APPLICATION

LREP BROWN, MARTIN, HALLER & MCCLAIN LLP, 1660 UNION STREET, SAN DIEGO, CA, 92101-2926

CLMN Number of Claims: 12 ECL Exemplary Claim: 1 DRWN 2 Drawing Page(s)

LN.CNT 759

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

- L2 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN
- A member of the "Salinospora" group was examd. and was found that strain CNB-392 produces the chem. unique and highly bioactive metabolite salinosporamide A. Salinosporamide A exhibits potent cancer cell cytotoxicity and appears to exert its cytotoxic effects through inhibition of the 20S proteasome. "Salinospora" strain CNB-392 was isolated from a heat-treated marine sediment sample that was plated on sea-water-based agar nutrient medium. Salinosporamide A appears to be a direct product of the fermn. rather than a subsequent transformation product of a precursor similar in structure to that of lactacystin. Salinosporamide A displayed potent in vitro cytotoxicity against HCT-116 human colon carcinoma with an IC50 value of 11 ng/mL. This compd. also displayed potent and highly selective activity in the NCI's 60-cell-line panel with a mean GI50 value (the concn. required to achieve 50% growth inhibition) of less than 10 nM and a greater than 4 log LC50 differential between resistant and susceptible cell lines. The unique functionalization of the core bicyclic ring structure of salinosporamide A appears to have resulted in a mol. that is a significantly more potent proteasome inhibitor than omuralide.
- AN 2003:101938 CAPLUS
- DN 139:81745
- TI Salinosporamide A: a highly cytotoxic proteasome inhibitor from a novel microbial source, a marine bacterium of the new genus Salinospora
- AU Feling, Robert H.; Buchanan, Greg O.; Mincer, Tracy J.; Kauffman, Christopher A.; Jensen, Paul R.; Fenical, William
- CS Center for Marine Biotechnology and Biomedicine Scripps Institution of Oceanography, University of California, La Jolla, CA, 92093-0204, USA
- SO Angewandte Chemie, International Edition (2003), 42(3), 355-357 CODEN: ACIEF5; ISSN: 1433-7851



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     English
LA
              THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 11
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 1
L2
AB
     The invention concerns the discovery of an actinomycete genus, given the
     name Salinospora gen. no., that displays an obligate requirement
     of the seawater (NA) for growth and unique 16S rRNA signature nucleotides.
     The invention is also the use of the genus for the prodn. and discovery of
     active biomols. such as pharmaceutical agents, agrichems.,
     immunomodifiers, enzymes and enzyme inhibitors.
     2002:465746 CAPLUS
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     137:43910
ΤI
     Marine actinomycete taxon for drug and fermentation product discovery
     Fenical, William; Jenson, Paul R.; Mincer, Tracy J.
TN
     The Regents of the University of California, USA
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SO
     PCT Int. Appl., 30 pp.
     CODEN: PIXXD2
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            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
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                                         EP 2001-989109
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L14 S SALINOSPORA

3 DUP REM L1 (1 DUPLICATE REMOVED) L2